tyco Electronics

M/A-COM

M/A-COM
221 Jefferson Ridge Parkway
P.O. Box 2000
Lynchburg, VA 24501

Telephone: (434) 455-6600

October 28, 2005

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

Re: Ex Parte Notice, Docket WT 96-86

Dear Ms. Dortch:

On October 26, 2005 the undersigned along with Dr. Dennis Martinez of M/A-COM, Inc. (WSBU), Dr. Ernest Hofmeisterof M/A-COM, Inc. (WSBU) and Damon Ladson of Harris, Wiltshire & Grannis LLP met jointly with Catherine Massey, Deputy Chief of the Wireless Telecommunications Bureau; Jane E. Jackson, Associate Chief of the Wireless Telecommunications Bureau; Thomas P. Stanley Chief Engineer of the Wireless Telecommunications Bureau; Michael J. Wilhelm, Chief of the Public Safety and Critical Infrastructure Division of the Wireless Telecommunications Bureau; Herbert W. Zeiler of the Wireless Telecommunications Bureau; Tim Maguire of the Wireless Telecommunications Bureau; Paul Moon of the Wireless Telecommunications Bureau; and John Evanoff of the Wireless Telecommunications Bureau.

The topics of discussion during this meeting included issues regarding the structure of the 700 MHz public safety wideband spectrum and the TIA-902 series of standards, which were recommended by the Nation Coordination Committee to the Federal Communications Commission. Additionally clarifications of the M/A-COM comments filed in response to the 7th Further Notice of Proposed Rulemaking in Docket No. WT 96-86 were provided and discussed. Attached hereto are copies of slides used by the M/A-COM representatives at this meeting on October 26th to facilitate the discussions.

If there are any questions, please do not hesitate to contact me. I can be reached at (434) 455-9465.

Sincerely,

tyco Electronics

M/A-COM

M/A-COM
221 Jefferson Ridge Parkway
P.O. Box 2000
Lynchburg, VA 24501

Telephone: (434) 455-6600

Robert J. Speidel
Manager, Government Affairs-Regulatory Policy

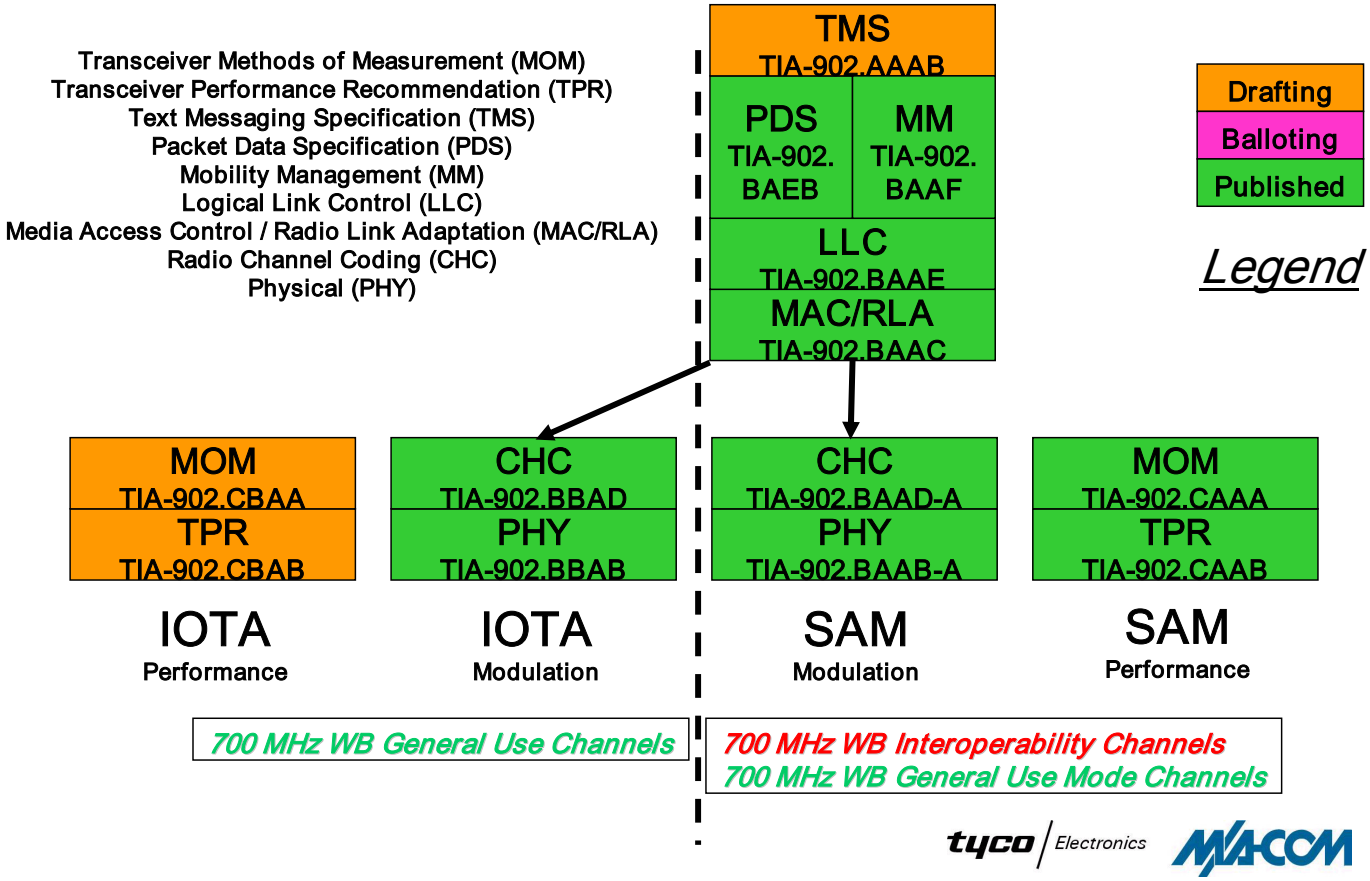
Attachment

tyco
Electronics

M/A-COM

cc: WT 96-86 (electronic filing & via USPS)
Catherine Massey (electronic and via USPS)
Jane E. Jackson (electronic and via USPS)
Thomas Stanley (electronic and via USPS)
Michael J. Wilhelm (electronic and via USPS)
Herbert W. Zeiler (electronic and via USPS)
Tim Maguire (electronic and via USPS)
Paul Moon (electronic and via USPS)
John Evanoff (electronic and via USPS)

TIA-902 Wideband Data Standards Suite



TIA-902 as WB Interop Std

- Summarize the M/A-COM position in recent comments and reply comments to the FCC's 7th NPRM (WT 96-86).
- What does M/A-COM envision will occur next?
- M/A-COM plan in the event the TIA-902 standard is not adopted by the FCC.

M/A-COM Position (as expressed in M/A-COM Comments to the 7th NPRM)

- M/A-COM participated as responsible TIA member in development of TIA-902 suite of standards, **but in 2003 M/A-COM also**
  - Publicly noted the SAM standard was complex, incomplete, and not robust/tested (as was TIA-102 when mandated in 2001)
- In the more than five years since start of WB standards development, the public safety community has *not* identified/scoped an operational need/ requirement/application justifying unit to unit WB data interoperability
- M/A-COM recommends the FCC *ADOPT* the TIA-902 (SAM) standard for operations on the designated WB interoperability channels.
- BUT, it is premature to mandate the inclusion of such standard in all 700 MHz WB data subscriber radios.
- In light of the lack of mature SAM subscriber equipment M/A-COM recommends the FCC *consider re-allocating* the currently designated WB interop channels as WB general use channels, thereby increasing the WB general use spectrum immediately available to eligible agencies.
  - WB designated interop channels would be designated out of the current WB reserve spectrum if and when the public safety community identifies an operational need justifying unit to unit WB data interoperability.

tyco / Electronics M/A-COM

What Will the FCC do? (M/A-COM's guess)

- In light of fairly widespread opposition to any mandate requiring the TIA-902 SAM standards in *all* subscriber WB radios it is unlikely the FCC will adopt such a mandate (i.e.M/A-COM expects the FCC will not require *ALL* subscriber WB radios to be capable of operating on the designated WB data interop channels)
- Furthermore, M/A-COM believes the FCC will:
  - Re-affirm the currently designated WB data interop channels are in place for WB data interoperability & will not re-designate such channels as general use.
  - State the TIA-902 (SAM) suite of standards was developed at FCC/NCC request & will facilitate WB data interoperability on the designated WB data interop channels.
  - Adopt the TIA-902 standard for operations on the designated WB data interop channels and will reguire licensees use such standards if operating on the designated WB data interop channels.
  - Allow the 700 MHz Regional Planning Committees to provide input to the licensees regarding operations on the designated WB data inter channels

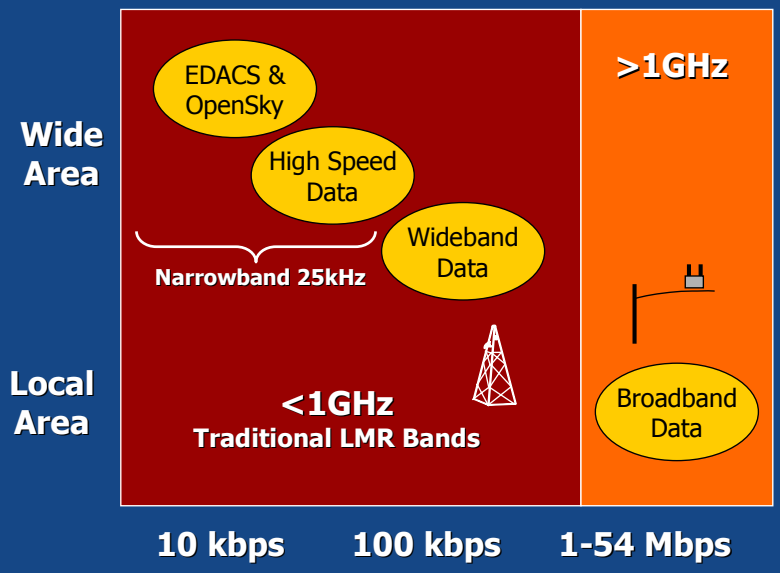
The M/A-COM plan if the FCC does not adopt TIA-902

- Independent of FCC's decision, M/A-COM will incorporate the fundamental advanced capabilities necessary to achieve required data rates for 700 MHz spectrum, to operate on the 50, 100, and 150 kHz channels, and to support high-speed and wideband data applications:
  - Complex linear modulations
  - Multi-carrier modulation
  - Complex receivers with equalization
  - Linearized power amplifiers
- With fundamental advanced capabilities, the full suite of TIA-902 standards including SAM (and IOTA) can be supported.
- Fundamental advanced capabilities assure:
  - Future ready and future proof system product and solution
  - Solution that handles any current needs, but with flexibility, expandability, and scalability for future needs

M/A-COM & TIA-902 SAM
(evidence of investment to date/commitment to future)

- **TIA-902 SAM Wireless Demo**
  - 1st Half of CY 2006
- **Equipment Prototype Demo**
  - Within 6 months of Wireless Demo
- **Production Deployment**
  - Within 6 months of Prototype Demo

One Size Does Not Fit All



- **NarrowbandData**
  - 7/800 MHz
  - 25 kHz channels
- **Wideband Data**
  - 700 MHz
  - Wideband channels
  - 50-150kHz channels
- **Broadband Data**
  - IEEE 802.11 Today
  - 4.9 GHz PS Future
    - *802.16 WiMAX*
    - *802.11 WiFi*
  - > 1MHz channel

tyco / Electronics MA-COM